Instruction Manual

BOLEX 160
MACROZOOM

Your camera has been supplied with:

1 sling-strap
1 filter mount
2 PX-13 batteries for the automatic diaphragm regulation
1 Multitrix for titling and various trick effects
1 cable release fitted with a locking screw

You now have a really modern camera with outstanding optical features. The completely original concept of your camera is the result of a long experience in the high-precision manufacture of movie-making equipment. The Bolex 160 is the latest in a long line of cameras which are traditionally unrivalled for quality.

If you are a beginner to filming, you will be thrilled how you can make successful movies easily. And if you are experienced, you will appreciate the numerous advantages of this new acquisition. Here's wishing you many happy hours with your Bolex 160 camera.

We strongly recommend that after reading this instruction manual, a trial cartridge of film is used in the camera and the results checked, before you film a holiday trip or any important event. This will help you to get to know the camera and will show if you are following the instructions correctly. When in doubt, see your Bolex dealer for advice or help.

Through our world-wide organisation, we can offer impeccable after-sales service in practically every part of the world. If service is required, return your camera to a Bolex distributor. He alone is authorised to carry out repairs, adjustments and maintenance work. Please remember to quote the serial number—engraved on the accessory attachment plate—in any correspondance with your Bolex dealer or distributor.

BOLEX 160 MACRODROM

Contents

Get to know your camera 4

6 Technical data

Setting-up 7

7 Lens hood
7 Viewfinder eyecup
8 Eyepiece adjustment
9 Checking the batteries

Loading the camera 11

11 Cartridge
12 Bolex-Lite S2

Filming 13

13 Operating the mechanism
13 Speeds
13 Slow-motion effect
14 Framing the subject
14 Power-zoom
15 Focusing and "optical dissolve"
16 Depth-of-field
17 Locking the exposure system
18 Curtain effect
18 Filters
19 Film counter

Multitrix 20

21 Mounting
21 Operation
22 Examples

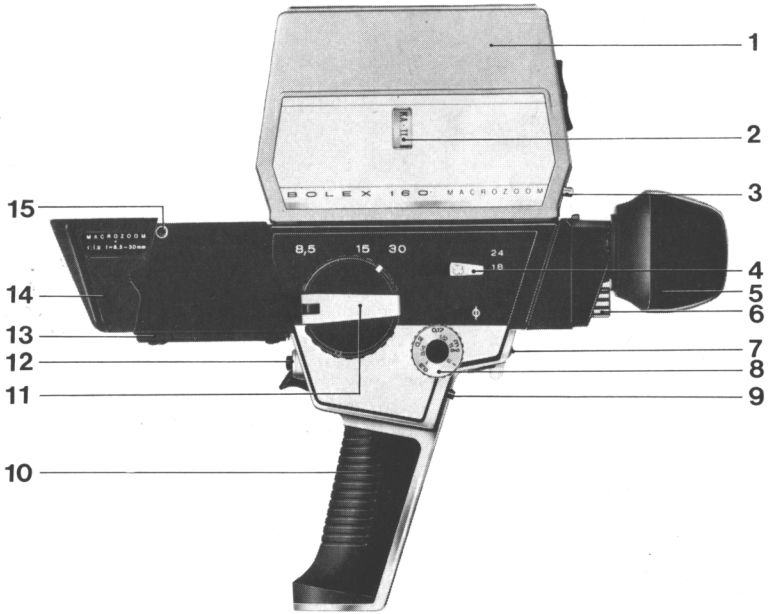
Look after your camera 25

25 Lens and filters
25 Lubrication
26 Replacing the batteries

Accessories 27

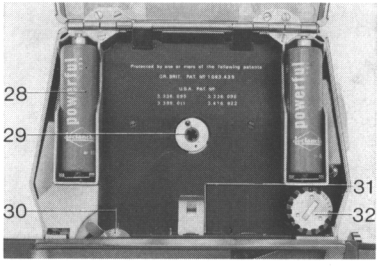
A few suggestions 28

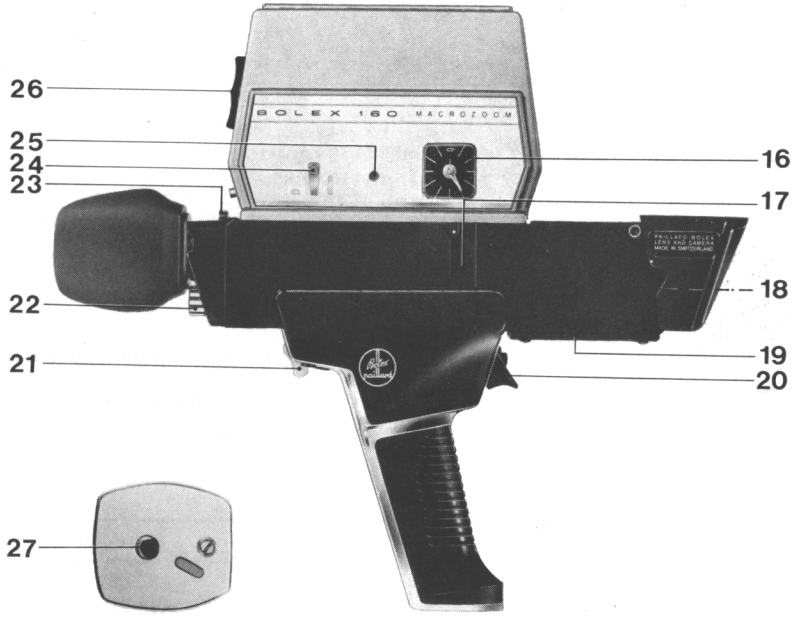
Get to know your camera



1. Magazine (p. 11 and 26).
2. Identification window for film.
3. Magazine opening catch (p. 11).
4. 18 and 24 f. p. s. speed selector.
5. Viewfinder eyepiece with rubber eyecup (p. 7 and 8).
6. Knob for closing the viewfinder (p. 8).
7. Single frame by using the cable release (p. 13).
8. Focusing knob (p. 15).
9. Release button for filming speed 36 f. p. s. (p. 13).
10. Pistol grip.
11. Focal length (zoom) knob with folding lever (p. 14).
12. Automatic exposure locking button (p. 17).
13. Slot for filter mount (p. 18).
14. Lens hood (p. 7 and 18).
15. Buttons for pushing back the lens hood (p. 7).
16. Film counter (p. 19).
17. Bolex S2 Lite fixing shoe (p. 12).

18. Macrozoom lens.
19. Accessory attachment plate.
20. Trigger (p. 13).
21. Fixation for sling-strap.
22. Knob for locking the eyepiece (p. 8).
23. Fluted knob for eyesight adjustment (p. 8).
24. Battery checking lever (p. 9 and 10).
25. Correct film transport indicator.
26. Power-zoom.
27. 1/4″ threaded hole for tripod or Minipod.
28. Motor batteries (p. 26).
29. Cartridge driving device.
30. Lever for manual override of the conversion filter (p. 11 and 12).
31. Gate.
32. Exposure system batteries compartment (p. 26).





Technical data

Bolex 160 camera with Macrozoom 8.5-30 mm f/1.9 lens.
— Super 8 film in Kodak-type 50 ft. cartridges.
— Cartridge duration : 3 min. 20 sec. at the speed of 18 f. p. s.
— Interval between two consecutive divisions of film counter : 8.3 sec. or 25″ of film.
— Filming speeds : 18, 24 and 36 f. p. s.
— Single frame by using the cable release.
— Power-zoom.
— Exposure time : 1/47 second at 18 f. p. s.
— Electric motor fed by four "penlight" 1.5 volt batteries (international "A. A." size).
— Photo-resistance fed by two long-life batteries, ref. Mallory PX-13.
— Range of sensitivities : 25-160 ASA (15-23 DIN).
— Diaphragm apertures : f / 1.9 - f / 16.
— Filming distance :

Distance measured from	film plane ϕ	front lens
All focal lengths	≃ 1 ft. (30 cm)	≃ 6″ (16.5 cm)
Focal length 30 mm	≃ 6 1/2″ (17 cm)	≃ 1″ (3.0 cm)

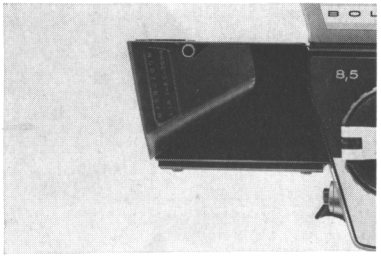
— Magnification (ratio picture on film/subject) for f = 30 mm and distance 17 cm : g = 0.223.
— Minimum field size (f = 30 mm, distance 17 cm) : 1″ × 7 1/4″ (24 × 18 mm).

Setting-up

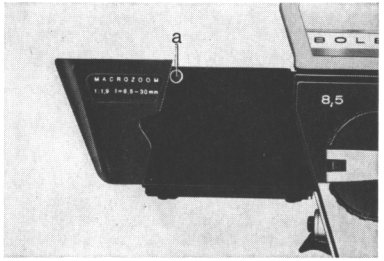
Your Bolex **160** camera is extremely simple to operate. Before you start filming, however, some setting-up and a few checks are necessary. First of all, lift the lens hood.

Lens hood

The tilting lens hood of the Bolex **160** camera can occupy three positions :

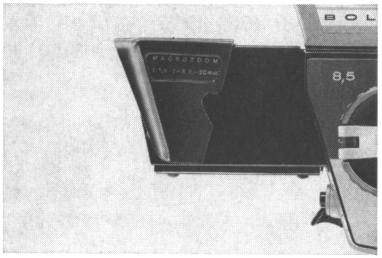


● Closed position, protecting the front of the lens between takes.



● Filming position.

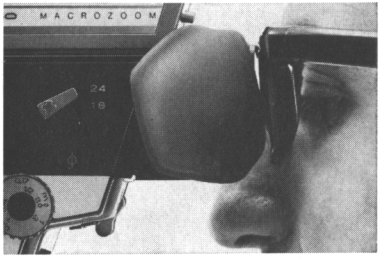
● Close-up filming position.



Press the two buttons (a) simultaneously and push the lens hood back.

Viewfinder eyecup

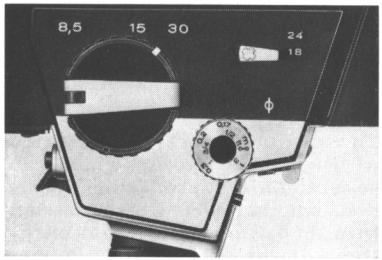
The viewfinder eyepiece is fitted with a rubber eyecup which can be set to the most convenient position, whether you prefer viewing with the left or right eye. A click-stop device keeps the rubber eyecup in place.



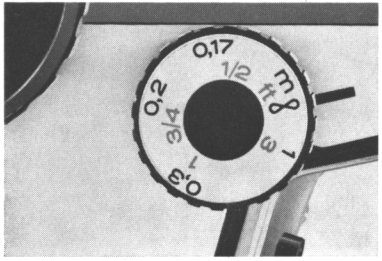
● If you wish, you can also fold the eyecup forward, especially if you wear spectacles.

Eyepiece adjustment

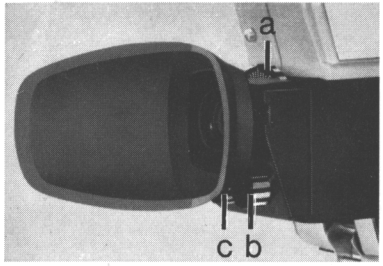
For comfortable viewing, the viewfinder eyepiece should be adjusted to your particular eyesight.



- **Set the focal length to 30 mm.**



- **Set the focusing knob to infinity (∞).**

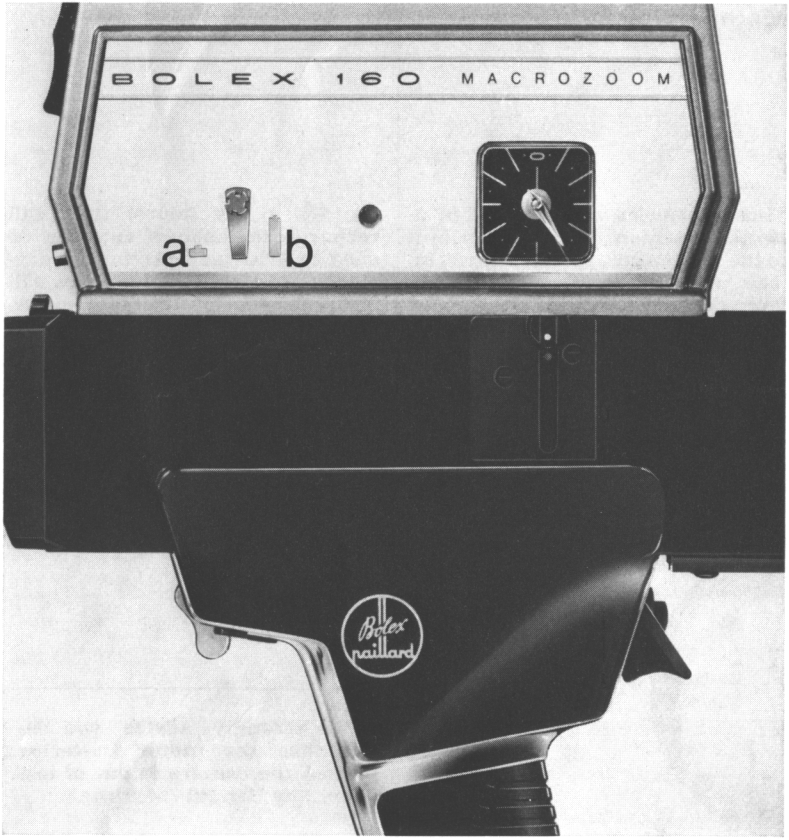


- **Sight a subject at more than 500 feet (fine vertical line) and turn the fluted knob (a), after having loosened the locking knob (b), until the picture is as sharp as possible in the centre.**

- **After having adjusted the eyepiece to your eyesight, lock it by means of knob (b).**

Important

For this adjustment, it is obvious that the closing device of the viewfinder should be in position "open". This device which is operated by means of knob (c) is used only when you film without your eye to the viewfinder, and it prevents any danger of stray light fogging the film.



Checking the batteries

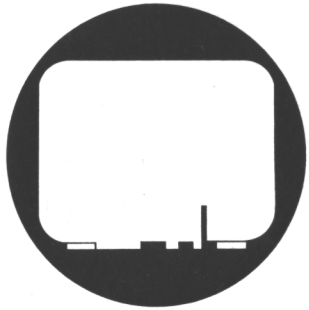
Before using the camera, remember to check the condition of the batteries. It is advisable to repeat this check from time to time. The Bolex 160 camera requires four batteries for the motor and two other batteries for the automatic exposure system.

Automatic exposure system batteries

A device called a photo-resistance reacts to changing light conditions and adjusts the lens diaphragm accordingly. With your eye to the viewfinder, pull back (a) (see preceding page) the small lever on the right hand side of the magazine. As long as the needle, visible in the viewfinder, reaches or moves to the right of the position shown below, the batteries are still good.
Otherwise, both batteries must be replaced (see page 26).
On an average, the batteries last from one to two years. By closing the lens hood after every take, you can preserve them from running down prematurely.

Motor batteries

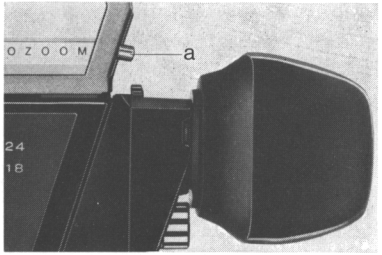
These batteries are checked in a similar fashion. With your eye to the viewfinder, push forward (b) (see preceding page) the small lever on the right hand side of the viewfinder. As long as the needle, visible in the viewfinder, reaches or moves to the right of the position illustrated below, the batteries are still good, all four batteries must be replaced (see page 26).
After intensive use, the batteries may run down prematurely. However, if they are taken out of use for a few hours, they will recharge themselves and can be used to drive several more cartridges of film. New batteries will last for between 10 and 15 cartridges of film, depending on the temperature. Battery capacity decreases sharply at low temperatures. At —10° C (14° F) only 1 or 2 cartridges can be used.
As a general rule, batteries should be changed once a year, even if the above mentioned number of cartridges has not been used.



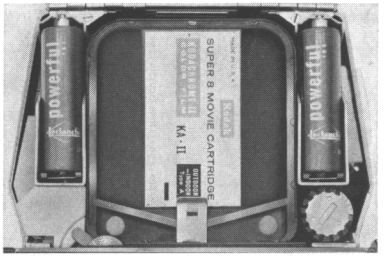
We strongly advise you to remove the motor batteries when the camera is out of use for any length of time.

Loading the camera

All that remains is to load your camera — and you are ready to film. The Bolex 160 camera is designed to take Super 8 film in cartridges. Mostly, you will probably use colour film which is specially designed for use in artificial light conditions. A built-in conversion filter enables you to use that type of film in daylight as well as in artificial light. Camera loading is extremely simple:



- Open the magazine lid by pressing catch in (a).
- Slip the cartridge of Super 8 film into the magazine so that the

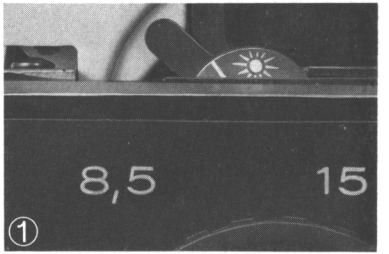


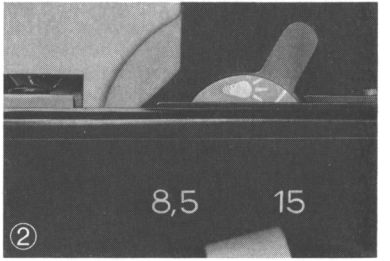
identification label is on the outside with the flattest end downward.
Press the cartridge firmly into place.
Before closing the magazine, make sure that the conversion filter lever is in the correct position.

Remark

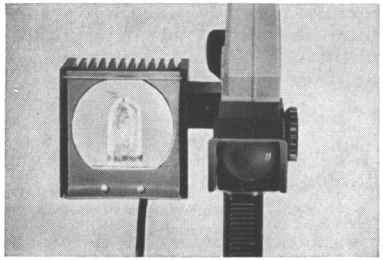
You can use:
— colour films (artificial type) with a sensitivity from 40 to 160 ASA (17-23 DIN).
— black and white or colour films (daylight type) with a sensitivity from 25 to 100 ASA (15-21 DIN). However, black and white films with a sensitivity from 160 to 200 ASA (23- 24 DIN) can readily be used—provided the lever for manual override of the conversion filter is set to "artificial light" position (whether you film in daylight or artificial light).

I. Lever position for daylight filming (filter in place).





II. Lever position for artificial light filming (filter moved aside).

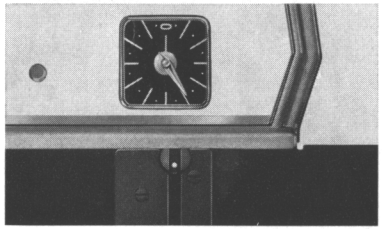


● For even greater simplicity when filming in artificial light, use the Bolex-Lite S2 650 or 1000 W especially designed for the Bolex 160 camera.

● You can then leave the filter lever in "daylight" position permanently as the conversion filter automatically moves aside when the lamp is switched on—and automatically moves back into place when the lamp is switched off.

To take advantage of this automatic system, you must fix the Bolex-Lite S2 into the special shoe on the right hand side of the camera.

Note

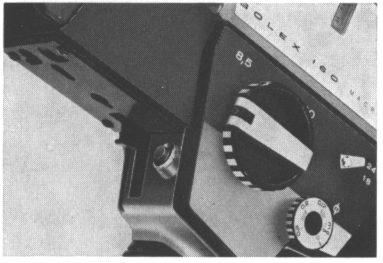


The "daylight" position of the filter is marked on the lamp fixing shoe on the right hand side of the camera. When the filter is in this position, the white dot on the spindle is opposite the blue dot.
In subdued light, the magazine can be opened at any time to alter the position of the conversion filter, without any risk of fogging the film.
When using black-and-white or daylight type colour film, the filter lever should be kept permanently in the "daylight" position, the filter itself being automatically moved aside by the cartridge.

Filming

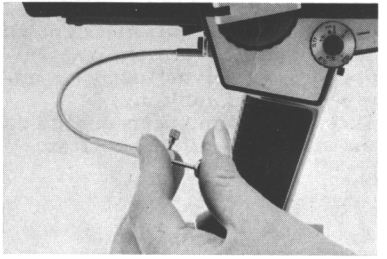
Operating the mechanism

Safety position with trigger up.

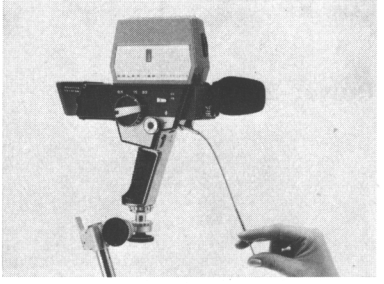


You can start the mechanism :

● for normal operation either by pressing the trigger or by using the flexible cable release supplied with the camera. To fit the cable, lift the trigger up to the safety position and screw the cable into the threaded hole.



● for continuous operation by using the cable release with its locking screw (instructions given above).

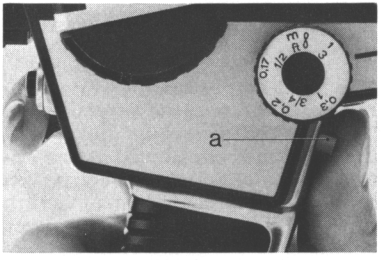


● for single frame operation by using the cable release. In this case it should be screwed into the hole in the back of the grip. This method of release makes it possible for you to produce titles, cartoons, accelerated motion, etc.

Speeds

The camera normally runs at 18 f. p. s. (switch set horizontally). The speed of 24 f. p. s. is used either to increase picture steadiness when panning or filming from a moving vehicle, the projection speed remaining 18 f. p. s., or with a view to achieving the best possible postsynchronization on a projector running at the speed of 24 f. p. s. This will give a very noticeable slow-motion effect during projection.

Slow-motion effect



If, during filming, you press knov (a) with the thumb, the film is driven at the speed of 36 f. p. s., regardless of wether the spleed selector is set on 18 or 24 f. p. s. This will give a very noticeable slow-motion effect during projection.

Warning ! Operate button (a) only after having pressed the trigger, otherwise the first image may be incorrectly exposed.

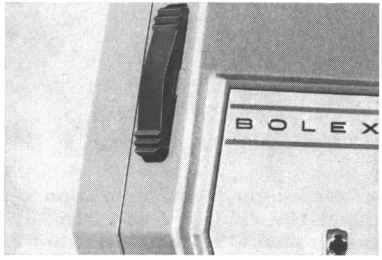
The Bolex 160 camera is equipped with a superb lens : the Bolex 8.5-30 mm f/1.9 Macrozoom which allows to focus on distances reaching from 1 inch off the front lens up to infinity, without using any optical attachment.

Framing the subject

The focal length knob enables you to frame the subject as you wish. The most natural relief and movement will be reproduced at projection if the shots have been taken around the standard focal length (f = 15 mm). If circumstances should prevent you from a correct framing of the subject by applying this focal length, you then frame the subject as you wish by either using a wide-angle focal length (f = 8.5 mm) if it is impossible to withdraw further or telephoto (f = 30 mm) if you cannot approach.

Focal length can also be changed during filming. This effect, known as "zooming", creates the impression of moving away or approaching the subject.
Successful zoom effects depend on the steadiness of the camera :

Power-Zoom



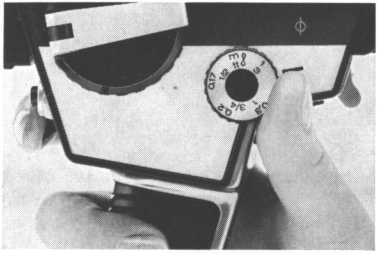
● Press the top of the rockingknob and the lens moves to the telephoto position. Press the bottom of the knob to obtain the wide-angle position.
The power-zoom enables you to achieve very smooth and continuous zoom effects.

When zooming manually, you will find it easer to frame the picture if the zoom lever is swing outwards.

Note : Zoom effects are possible from 1 ft. off the film plane (about 17 cm off the front lens). A special device automatically locks the zoom knob at position f = 30 mm when focusing is done at a shorter distance (see next page).

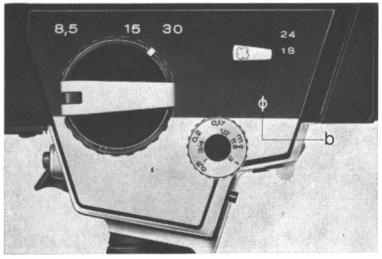
Focusing

The viewfinder of your camera has a rangefinding system called "coincident rangefinder" which makes for extremely accurate focusing. When the focusing knob is incorrectly set, the picture appears double and blurred in "telephoto" position.



● For accurate focusing, set the zoom knob to f = 30 mm, sight the subject and turn the focusing knob until the picture is as sharp as possible in the centre. If you should not succeed, check the eyepiece adjustment according to the instructions given on page 8.

Close-up focusing



Focusing at distances inferior to 1 ft. off the film plane (b) can be done only with the zoom knob set to telephoto position f = 30 mm. An automatic locking system excludes any error.

Optical dissolve

By manoeuvering the distance knob (when the zoom knob is set to telephoto position), you can obtain an "optical dissolve"; this special effect permits, for instance, a smooth and pleasing transition between two scenes (see page 28).

Note

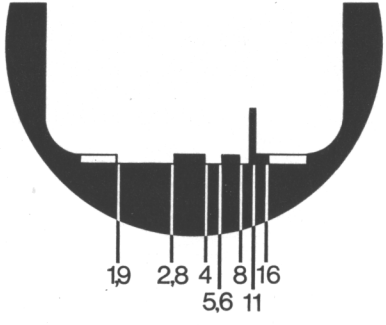
We recommend you to set the focusing knob after every take back to the "infinity" (∞) position. Thus your camera will always be ready to take most of the subjects that may happen to appear unexpectedly in front of your lens. (See on this subject the depth-of-field chart, at the end of the instructions manual).

Depth-of-field

The depth-of-field is the zone, in front of and behind the subject, which will be in sharp focus. It varies according to the focal length used, the lens diaphragm aperture and the focusing distance.
The longer the focal length (that is, the nearer to 30 mm), the larger the lens diaphragm aperture (to f/1.9), or the shorter the focusing distance, the shallower the depth-of-field will be. Conversely, the shorter the focal length (that is, the nearer to 8.5 mm), the smaller the lens diaphragm aperture (to f/16), or the longer the focusing distance, the greater the depth-of-field will be.
Consult the depth-of-field chart in the condensed instructions for use.

Automatic exposure system

● The setting of the diaphragm aperture is fully automatic. It is controlled by a photo-resistance fed by two batteries (for checking and replacing batteries see pages 9 and 26).
The light is continuously measured as it passes through the lens. The automatic exposure system takes into account the sensitivity (ASA speed) of the film in use, by means of a special notch in the film cartridge. The position of this notch varies according to the type and sensitivity of the film.



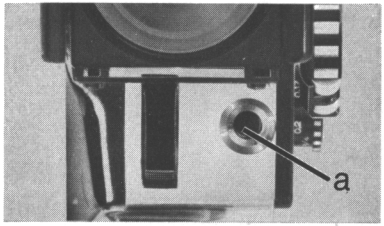
● The cut-out scale of the lower part of the viewfinder indicates the lens diaphragm aperture selected by the automatic exposure system.

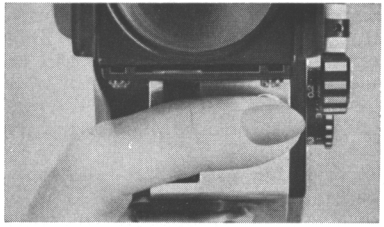
At each end of this scale is a coloured zone. If the needle enters the red zone (on the left), the light is unsufficient for filming. On the other hand, if the needle enters the yellow zone (on the right), this indicates that the light is too strong for filming.

Exceptions

When using film of 40 ASA (17 DIN) sensitivity or lower, and filming snow or beach scenes, or backlighted subjects, you can continue even if the needle is in the yellow zone. On the other hand, when shooting night sequences outdoors (illuminations, fireworks, neon signs, etc.) you can achieve excellent results even if the needle is in the red zone.

Locking the exposure system





● If you wish, the automatic exposure system can be locked, either before or during filming; this is used mainly under the following conditions:
— to avoid an undesirable reaction of the diaphragm while filming alternately light and dark subjects or following a moving subject which is passing in front of a contrasted background;
— to lock the lens diaphragm at any desired aperture, before filming, in order to achieve deliberate over or under-exposure.

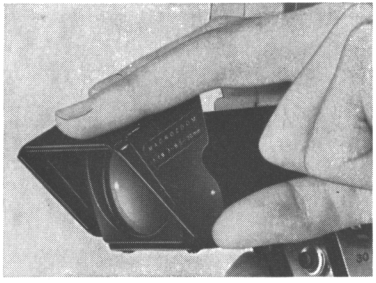
● The automatic exposure system is locked by simply pressing button (a).
To obtain any desired lens diaphragm aperture, aim the camera at a bright or dark subject, according to whether require a small or large aperture. Move the camera slowly away from this subject until the needle reaches the aperture required. Now press the button (a). As soon as the button is released the automatic exposure system will function normally.

Remark

The needle may shift while you are pressing the exposure locking button. This is however of no importance as the diaphragm aperture stays unchanged.

Curtain effect

The tilting lens hood allows to achieve very easily a "curtain effect" at the beginning or the end of a sequence.



● Tilt the lens hood slowly when starting or finishing your shot.

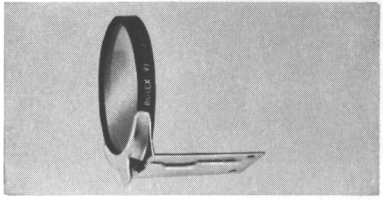
Remark

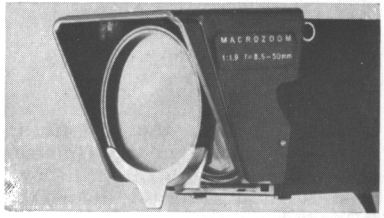
A closing curtain effect can be done without any particular precaution. However, at the beginning of the sequence (opening effect), the diaphragm should be locked as otherwise the film may be over-exposed due to a normal reaction of the automatic exposure system.
In this case, proceed as follows :
— Sight the subject.
— Lock the diaphragm aperture at the position corresponding to the light conditions of the subject chosen.
— While pressing the locking button, close the lens hood.
— Start filming and open the lens hood progressively.
— As soon as the lens hood is completely open, release the locking button.

Filters

A filter mount is supplied with the camera and it accepts standard ASA Series VI rim mounted filters.

● Place the filter in the filter mount.



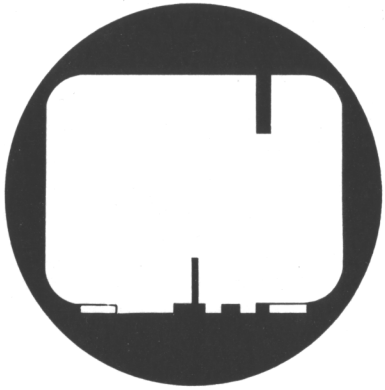


● Slip the filter mount into its slot.
As the light is measured through the lens, the exposure system automatically takes into account the effect of the filter.
When a filter is in position it does not prevent the lens hood from being closed between takes.

Film counter

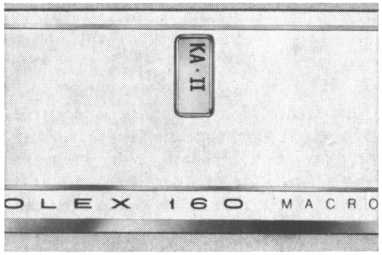
● After filming several sequences you may want to know how much film is left in the magazine.

● The counter needle rotates clockwise. One complete revolution of the needle equals the total length of film in the cartridge (50 ft. = 3 min. 20 sec. of filming time at 18 f. p. s.). The counter is divided into 24 segments, each corresponding to approximately 8 seconds of filming time (or 2 ft. of film). The needle automatically returns to zero when the cartridge is removed.



● A signal in the viewfinder (on the top right corner) indicates when the cartridge is fully used or when the magazine is unloaded.

When the film is finished, open the magazine lid. Take out the cartridge and send it for processing, following the instructions given by the film manufacturer.
You can, if required, unload the camera even if the cartridge has not been fully used. Only the short length of film visible in the aperture of the cartridge will be fogged. Remember to note the length of film which has been exposed before removing the cartridge, for when you reload this cartridge, the counter will not take this into account.



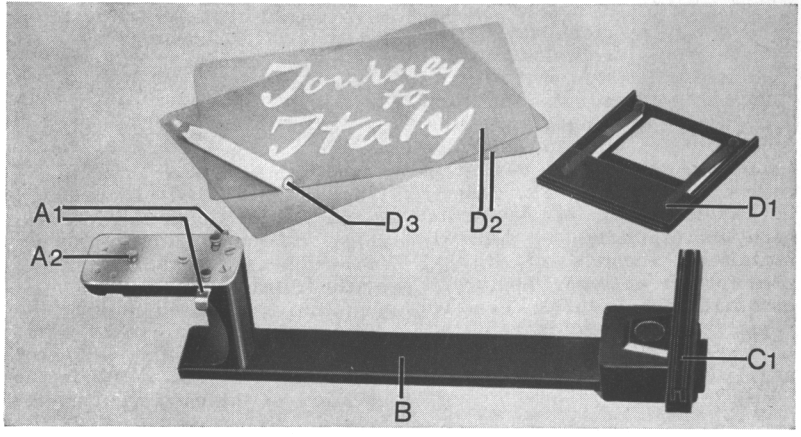
● The film identification window (on the left hand side of the magazine) enables you to check if your camera is loaded or unloaded and to identify the type of film in use without being obliged to open the lid.

Multitrix

Technical data

Length overall: 9″
A. Mounting attachment with:
A 1. Spring mounting clips.
A 2. Centering pin.
B. Guide rail.
C. Sliding card frame with:
C 1. Double-slotted holder mounted on a swiveling stand.
D. Accessories, including:
D 1. Color transparency holder.
D 2. 2 transparent acetate sheets.
D 3. white grease pencil.

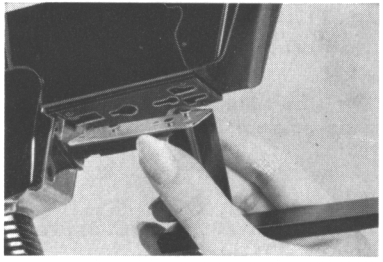
The Bolex Multitrix is a simple, practical accessory which, mounted on the Bolex 160 camera, enables you to spice-up your films with titles, views from picture postcards, or color transparencies and intriguing trick effects, all of which will add interest to your films and give them an enviably professional finish.
The Bolex Multitrix cuts down on the editing of the film because the titles and other insert shots can be filmed when they are needed, right on location, without any difficulty.



Mounting

The Multitrix is mounted under the camera lens, as follows:

— Push the camera trigger down to the filming position.



— Hold the accessory by pushing its two locking clips between finger and thumb.

— Engage the accessory in the slots of the base plate, push it thoroughly, then release the mounting clips.

Operation

The Multitrix enables you to frame subjects of any size from a postcard to a postage stamp, either by varying the focal length of the lens or by changing the distance of the card frame.

1. You can place the Multitrix card frame completely forward against the stop, as shown opposite. By varying the focal length of the lens, the filming field will range from

— $4\frac{3}{4}'' \times 3\frac{1}{2}''$ in the wide-angle position to

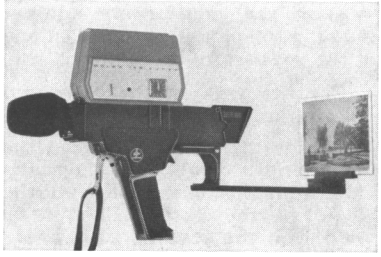
— $2'' \times 1\frac{1}{2}''$ in the telephoto position.

2. You can shift the card frame itself, moving it closer or further away from the lens. The filming field will range from

— $2'' \times 1\frac{1}{2}''$ with the card frame completely forward to

— $1'' \times 7\frac{1}{4}''$ (24 × 18 mm) with the card-frame toward the lens (lens hood folded back).

When moving the card frame closer, only the telephoto focal length can be used, owing to the special characteristics of the Bolex 160 camera.



Examples

a) Titles on postcards

— Write the title directly on a postcard, using a felt-tipped pen or a lipstick.

— With the card frame against the stop, place the postcard in one of the grooves of the holder.

— Set the lens in the telephoto position and focus on the title.

— Frame the title by moving the focal length knob, leaving sufficient margin to ensure that the edges of the card will not be visible on the screen.

— Position yourself so that the light falls over one shoulder, tilting the card at an angle of about 45°; shoot.

You can dissolve the title into a regular scene by removing the card during filming while you bring the scene into focus by shifting the distance knob to infinity (∞). It is also possible to dissolve from the title to a second postcard placed in the second slot of the card frame.

b) Title on transparent acetate sheet

— Using the white grease pencil supplied with the Multitrix, draw the title on the acetate sheet.

— Place the acetate sheet in the card frame.

By varying the focal length of the lens, the distance setting, and the distance of the card frame from the lens, you can achieve many different effects, such as:

1. Sharp title with blurred background (or vice versa)

The title should be small enough so that it can be filmed in the telephoto position with the card frame against the stop or, even better, closer to the lens.

— Focus on the title and shoot.
The title can be dissolved into a background scene by moving the distance knob to infinity. By doing this, the title will become more indistinct as the background scene becomes sharper. The title can even be made to disappear altogether by moving the card frame right up to the lens.

2. Title and background sharp

The title should be filmed in the wide-angle position, with the card frame forward against the stop, to provide sufficient depth of field.

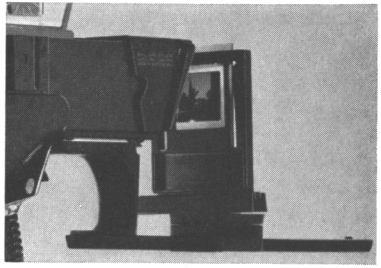
— Focus on a distance of approximately 7 ft. and film.
If there is sufficient light (diaphragm openings f/8 or smaller), you can focus on the background; and, in this way, you can dissolve from the title, filmed in the wide-angle position, to a detail in the background, filmed in the telephoto position, without the risk of blurred pictures.

3. Sharp title with moving background

Proceed as described under point 2, but, with the diaphragm locked in position, pan the camera rapidly over a not-too-distant background, for instance, along a wall, a row of trees, or a road. The camera movement should be fast enough so that the background appears blurred, or drawn-out.

A very effective transition can be achieved by stopping the camera at a pre-determined spot or subject and closing in on it by changing the focal length to the telephoto position. This will simultaneously blur the title.

c) Filming a color transparency



— Attach the transparency holder into the wide slot of the card frame holder, with the card frame facing the lens.

— Place the color transparency into the holder and frame it as desired.

— Aim the camera-Multitrix combination at a diffused white light, for instance, a white wall, a man's white shirt, or a white paper held several inches behind the transparency, and run the camera.

By aiming the camera at a colored background, you can modify the colors of the transparency and thereby obtain various interesting effects.

With clear transparencies, you can obtain an optical dissolve by filming through the transparency, focusing on a subject in the background. Striking transitions can be achieved in this way.

A series of color transparencies can be linked with soft-focus transitions by turning the focusing knob (see page 28).

d) Trick effects

The Multitrix enables you to produce all kinds of trick effects—limited only by your own ingenuity. For instance, you can create the impression of entering a room through the keyhole, or of surveying the landscape through a pair of binoculars, by shooting through cardboard masks and, if desired, moving the card frame with the mask toward the lens while filming.

You can also make the letters of a title typewritten on tracing paper slide into view through a window cut in black cardboard.

N. B.: For good mask effects, it is advisable to shade the rear of the mask while filming as, otherwise, extraneous light will make the mask appear gray instead of black.

How to look after your camera

Do not, under any circumstances, dismantle the camera. If you do, you may be involved in costly repairs and the guarantee will be void. The interior of the magazine must be kept spotlessly clean.

Lens and filters

The surface of the front lens and the filter surfaces should be kept absolutely clean. Use the special soft tissues sold in photographic shops. But avoid rubbing the surfaces more than necessary as this could damage the anti-reflection coating.
Close the lens hood between takes. Special care should be taken to avoid dust and fingerprints — perspiration attacks glass.

Lubrication

Like a high-quality watch, the camera rarely needs to be lubricated. When new it contains a reserve of grease and oil sufficient for two to three years. At the end of this time, it is advisable to return the camera to a Paillard-Bolex distributor for fresh lubrication.

Care of the camera in tropical regions

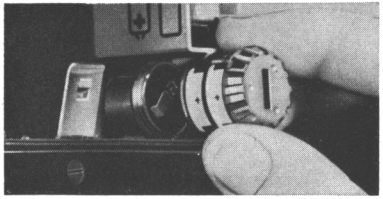
Certain precautions should be taken to protect both camera and films against heat and humidity. Airtight boxes and protective chemicals are available from photographic shops and we strongly recommend you to make use of them if you will be spending any time in the tropics.

Replacing the batteries

All the batteries used in your camera are housed inside the magazine and therefore can be checked easily at any time (see "Motor batteries").

Exposure system batteries

The two batteries for the automatic exposure system are in a special compartment. To insert new batteries :

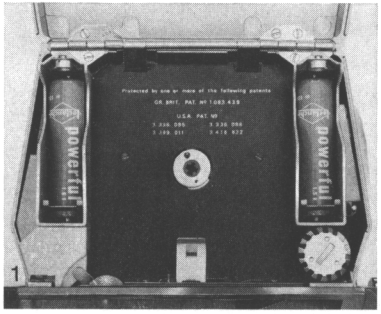


- Unscrew the compartment.
- Insert the two batteries, one on top of the other, well into the compartment, as shown in the diagram. The base, marked +, should be at the bottom and the coloured plastic seal upwards.

Screw the compartment back into place. Check the batteries (see page 9). Use long-life batteries Mallory type PX-13.

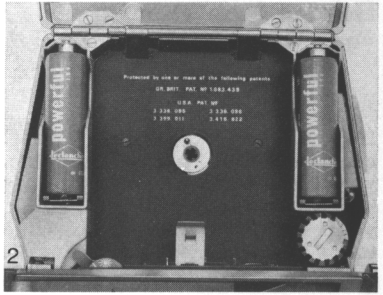
Motor batteries

The four motor batteries are grouped in two pairs. To insert new batteries, consult the diagrams on each side of the housings.



1

- Put in one battery, + end downwards (fig. I).

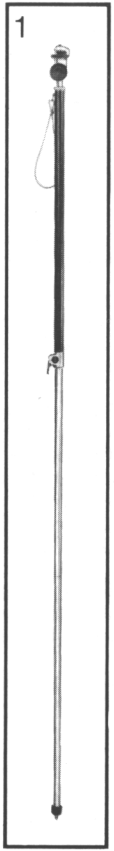


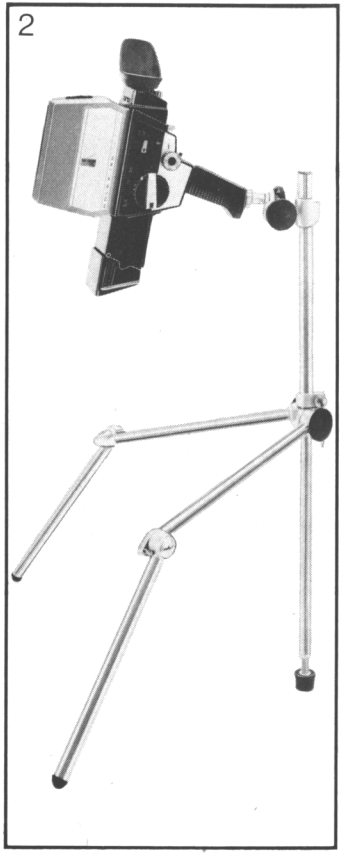
2

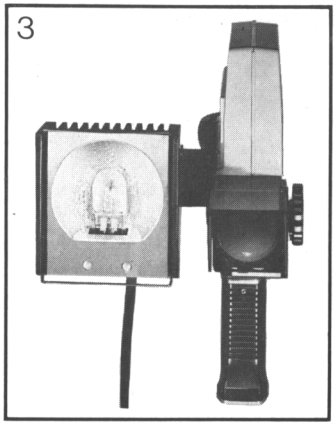
- To insert the second battery, first fit the — end into the lower spring, press downwards and then insert the + end into the terminal socket (fig. II).

It is advisable to use only the best quality batteries to avoid the risk of electrolyte leakage. Nevertheless, we strongly recommend that the motor batteries are removed when your camera is out of use for any length of time.

Accessories







1. The popular Bolex monopod ensures excellent stability.
2. The Bolex Minipod, light and of small size, allows to film in the best conditions of steadiness. (Special leaflet available.)
3. The high output Bolex-Lite S2 iodine-quartz 650 or 1000 W has been specially designed for your camera.
4. A black carrying case provides smart protection for the camera and contains enough room for several spare cartridges and the Multitrix.

A few suggestions

Make films full of life and movement

The Bolex 160 Macrozoom camera enables you to introduce in your films a transition that serves the same purpose as a lap dissolve, but without any of the tedious procedures necessary for producing the latter.
This special "dissolve" is obtained simply by manoeuvering the distance knob at an appropriate speed thoroughly (zoom knob set to telephoto position); the extreme long focusing range of the camera enables the area of sharpness to be shifted completely for producing a remarkably professional effect. For instance, a close-up can be "dissolved" to a second subject, slightly further away, and this dissolved into a long shot. This "optical dissolve", which provides an original scene transition with an illusion of depth, has the added advantage of being extremely simple to produce, indoors or out.

Keep the camera as steady as possible while filming. The slightest jerk is magnified on the screen and results in unsteady pictures.
The shape of your camera ensures an excellent hold. However, if circumstances permit, it is always advisable to use a monopod or tripod.

As a rule, a tripod is essential when taking single-frame exposures.

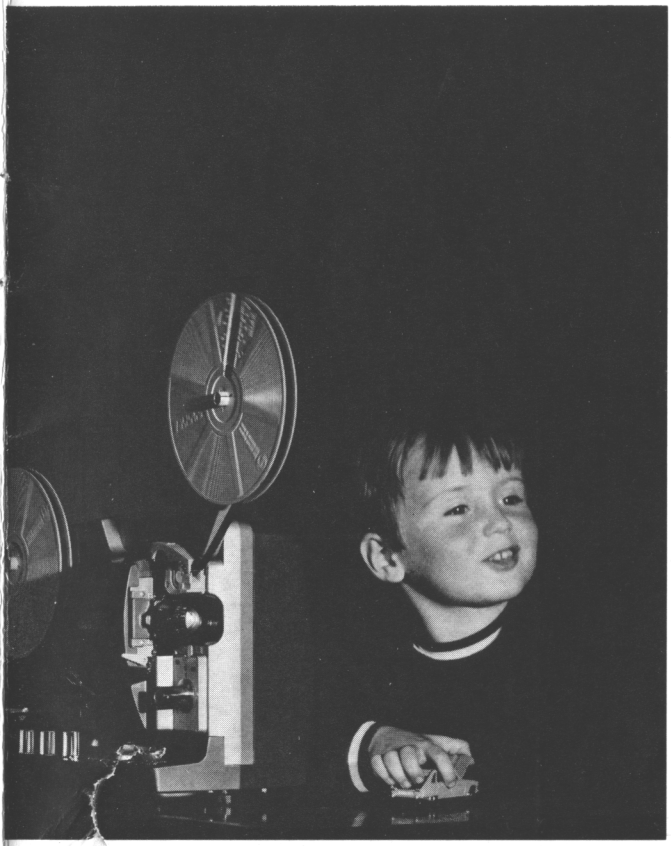
— Avoid long scenes or your film will drag. On the other hand very short scenes will make your films jerky and difficult to follow. Five to ten seconds is a good average length.

— Vary the angle of your shots. And vary their distance, with long shots, medium shots, close-ups, and extreme close-ups, thanks to the exceptional possibilities offered by the Macrozoom lens of the Bolex 160 camera. Remember that close-ups often provide the most interesting results and most spectacular effects on the screen.

— Keep camera movements to a minimum and reserve zoom effects for really deserving cases. In excess, they can become monotonous.

— Lastly, aim for varied and interesting effects. Your Bolex 160 camera gives you great scope.

— Use the Multitrix supplied with your camera. This accessory allows you to make your films more attractive by adding, during takes, some titles or pictures taken from postcards or slides. So you will give them a better finish.



Excitement in view!

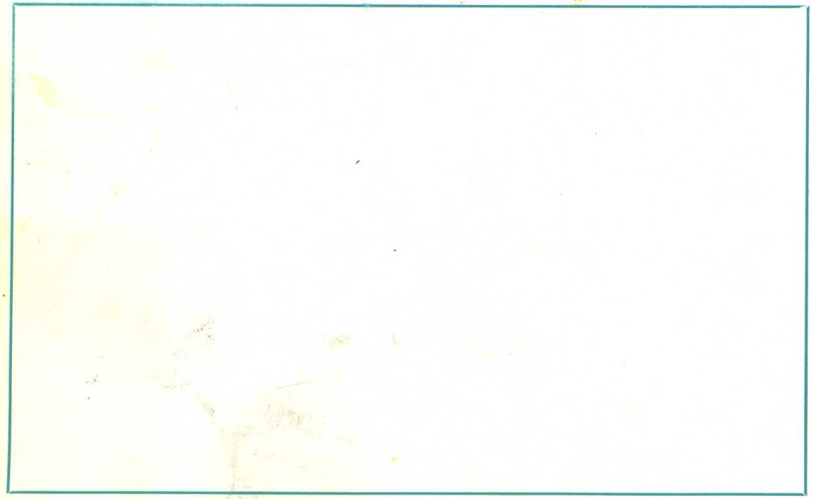
The most exciting and enjoyable part of filming? Projection, of course. Those happy, sunny holidays, the joyful play of your toddler discovering the sea, these memorable moments will come even more vividly to life if your film is accompanied by music, a narration, or the voices of those near and dear to you.

It's easy to add sound directly on the film today! The Bolex SM 8 sound projector is simple to use, yet has all controls for adding a complete soundtrack. Film threading is entirely automatic, even over the sound heads. All sound controls are arranged for maximum convenience, and you can use spools with up to 800′ of film. Other features include 12 V/100 W quartz-halogen lamp, built-in speaker, socket for external speaker, output for connection to home Hi-Fi sets, overplay possibility, and a mixing console available as an accessory.

The Bolex silent 18-5 Super projector features the same high quality and reliability and protects your films with kid-glove care. The 18-5 Super offers exceptional picture brilliance, corner-to-corner sharpness, faithful color reproduction, automatic threading, flicker-free slow motion at 5 f.p.s., and the possibility of adding sound by using a tape recorder connected to the 18-5 Synchronizer, available as an accessory.

Ask your photographic dealer to project one of your films on one of these projectors. Or ask the Bolex distributor to send you full information and literature on Bolex Super 8 projectors.

BOLEX INTERNATIONAL S.A., SAINTE-CROIX (SWITZERLAND)



ME 139/07 Anglais Printed in Switzerland